

1N4531 1N4534
1N4532 1N4536
1N4533

Diode, switching, leaded

These diodes are in a glass sealed envelope and are suitable for lead mounting on printed circuit boards.

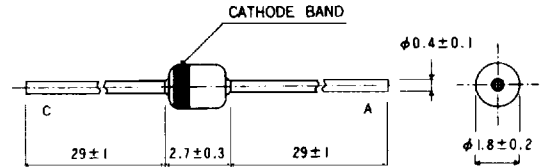
Features

- available in DO-34 package
- part markings, see following table

Applications

- general rectification

Dimensions (Units : mm)



Cathode band color and marking

Part no.	Color	Marking
1N4531	Black	31R
1N4532	Black	32R
1N4533	Black	33R
1N4534	Black	34R
1N4536	Black	36R

Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Part no.	Peak reverse voltage V_{RM} (V)	DC reverse voltage V_R (V)	Peak forward current I_{FM} (mA)	Mean rectifying current I_O (mA)	Forward current I_F (mA)	Peak forward current I_{FSM} 1 μs (A)	Power dissipation P (mW)	Contact temperature T_J ($^\circ\text{C}$)	Operating temperature T_{opr} ($^\circ\text{C}$)	Storage temperature T_{stg} ($^\circ\text{C}$)
1N4531	100	75	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N4532	75	50	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N4533	40	30	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N4534	75	50	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200
1N4536	35	25	450	150	200	2	500	200	-65 ~ +200	-65 ~ +200

1N4531, 1N4532, 1N4533, 1N4534, 1N4536 Switching diodes

Electrical characteristics (unless otherwise noted, $T_a = 25^\circ\text{C}$)

Part no.	Forward voltage V_F (V)												BV (V) (min)		Reverse current I_R (μA) (max)				Cap bet term C_t (pF) $V_R = 0$ $f = 1 \text{ MHz}$	Rev rec time t_{rr} (ns) $V_R = 6 \text{ V}$ $I_F = 10 \text{ mA}$ $R_L = 100 \Omega$
	0.1 mA	0.25 mA	1 mA	2 mA	5 mA	10 mA	20 mA	30 mA	50 mA	100 mA	200 mA	250 mA	@ 25°C		@ 150°C					
													5 μA	100 μA	V_R (V)	V_R (V)				
1N4531						1.0							75	100	0.025 5.0	20 75	50.0	20	4	4
1N4532						1.0							75		0.1	50	100	50	2	2
1N4533	0.49 ¹ 0.55	0.53 0.59	0.59 0.67	0.62 0.70		0.70 0.81	0.74 0.88						40		0.05	30	50.0	30	2	2
1N4534	0.49 0.55	0.53 0.59	0.59 0.67	0.62 0.70		0.70 0.81	0.74 0.88						75		0.05	50	50.0	50	2	2
1N4536								1.0					35		0.10	25	100	25	4	2

¹ The upper value for V_F refers to V_F min and the lower to V_F max.

Electrical characteristic curves

1N4531

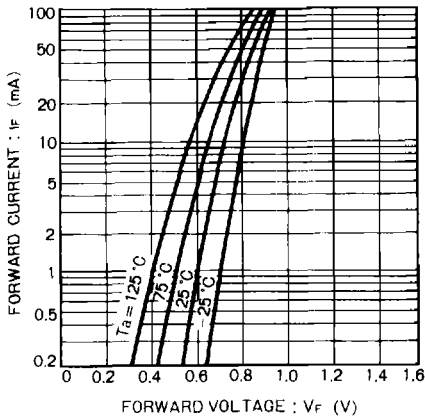


Figure 1

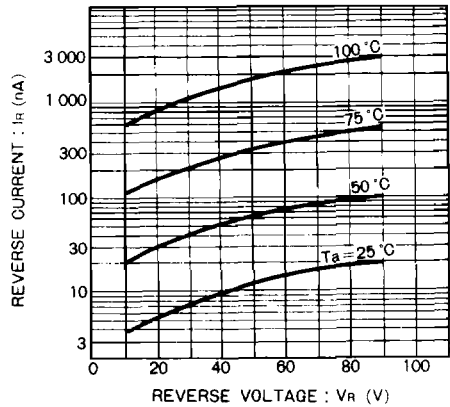


Figure 2

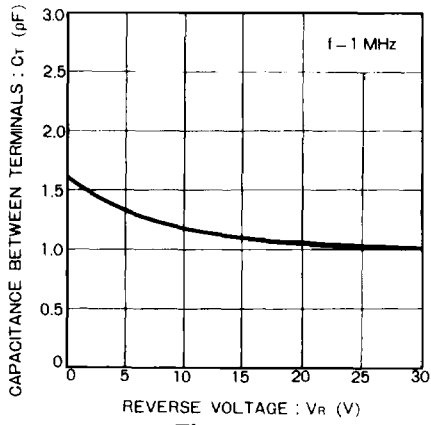


Figure 3

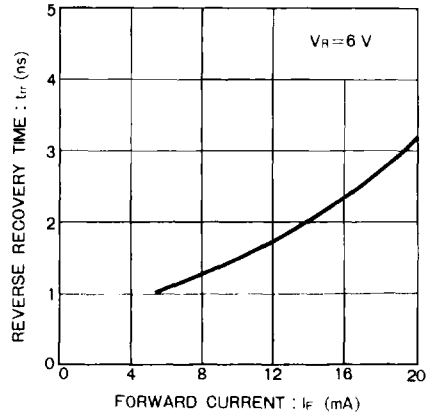


Figure 4

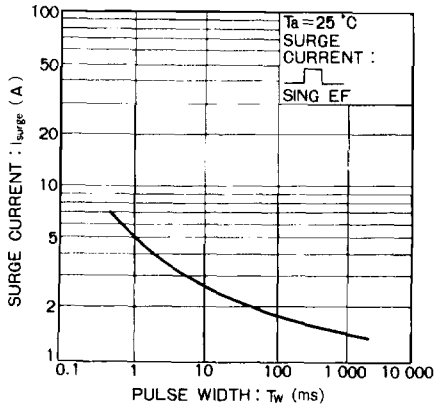


Figure 5

1N4531, 1N4532, 1N4533, 1N4534, 1N4536 Switching diodes

Electrical characteristic curves—1N4532, 1N4533, 1N4534, 1N4536

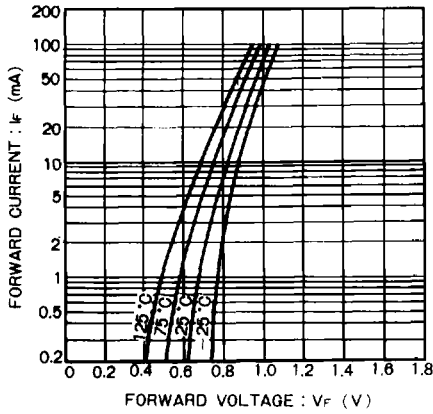


Figure 6

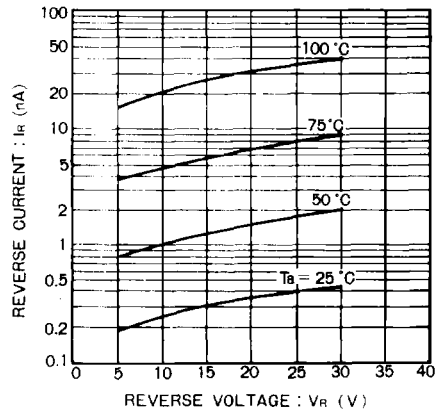


Figure 7

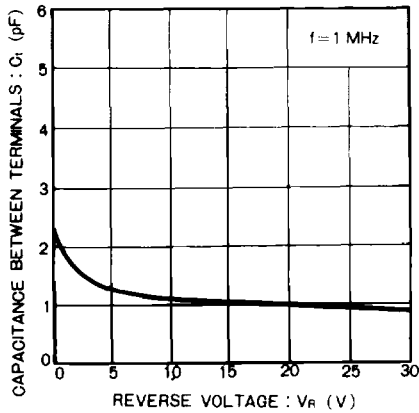


Figure 8

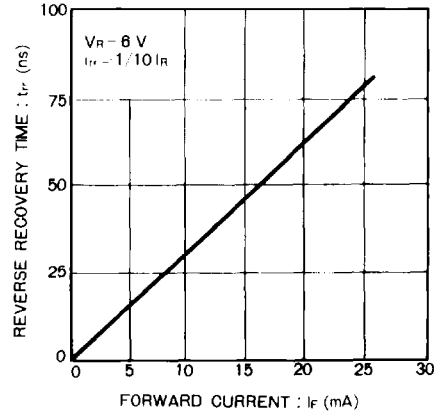


Figure 9

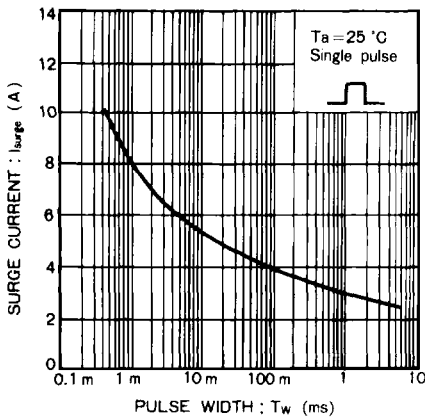
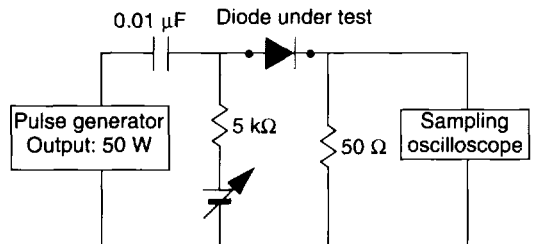


Figure 10



Test circuit for measuring reverse recovery time (t_{rr})

Figure 11